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cont.

wherein the conditions in the initial reaction stage aid in solubilizing the polyol and provide a stable heterogeneous reaction mixture.--

REMARKS

By the present amendment, Claims 2-4, 10, 11, 17, 18, 22, 24, 29, 31, 32, 40-42, 49, 50 and 56-58 have been canceled, and Claims 1, 13, 23, 30, 43 and 51 have been amended. The amendment of claim 1 relates to a selected embodiment and the amendments to claims 13, 23, 30, 43 and 51 are for matters of form.

Claims 79-118 have been added. Claims 79-84 claim substantially the same subject matter as Claims 10, 11, 21-23 and 25, respectively, of the Buter U.S. Patent No. 5,043,438. Claim 85 claims substantially the same subject matter as Claims 26, 59 and 64 of the Buter U.S. Patent No. 5,043,438. Claims 86-88 claim substantially the same subject matter as Claims 27, 31 and 32, respectively, of the Buter U.S. Patent No. 5,043,438. Claim 89 claims substantially the same subject matter as Claims 33 and 53, while Claims 90-107 claim substantially the same subject matter as Claims 34-39, 41-43, 46-52 and 54-55, respectively, of the Buter U.S. Patent No. 5,043,438. Finally, Claims 108-118 claim substantially the same subject matter as Claims 57-58, 60-63, 65-67, 69 and 71, respectively, of the Buter U.S. Patent No. 5,043,438.

Claims 1, 5, 6, 8, 9, 13-15, 23, 27, 28, 30, 43-45, 48, 51, 54, 55 and 62-118 are now pending in this application.

Applicants present this Amendment and Request for Interference Pursuant to 37 C.F.R. §1.607, together with the Amendment Requesting Interference Pursuant to 37 C.F.R. §1.607 filed by certificate of mail on August 21, 1992 in parent application Serial No. 07/932,275 (attorney

docket number 4233C), and respectfully request that an interference be declared between the present application and the Buter U.S. Patent No. 5,043,438. A copy of the Buter patent is included in Appendix A, and the information required by 37 C.F.R. §1.607(a) is set forth herein under headings which correspond to the subsections of 37 C.F.R. §1.607(a) to facilitate consideration by the Examiner.

**I. Identification of the Patent Claiming Subject Matter
Which Interferes With the Appleby et al Application**

The patent claiming subject matter which interferes with the subject matter set forth and claimed in the present application of Appleby et al (hereinafter “the Appleby et al application”) is U.S. Patent No. 5,043,438 which issued on August 27, 1991 with claims 1-21, naming Markus K. Buter as inventor and Van den Bergh Foods Company, Division of Conopco, Inc., as assignee, for “Process for the Synthesis of Polyol Fatty-Acid Esters” (hereinafter “the Buter patent”). The Buter patent issued from U.S. Application Serial No. 477,776 filed February 9, 1990 and on its face purports to claim priority of European Application No. 89200371.6 filed February 16, 1989 and European Application No. 89202931.5 filed November 20, 1989. The Buter patent was subjected to reexamination under Requests Nos. 90/002,711 filed May 1, 1992, 90/003,072 filed May 27, 1993 and 90/004,646 filed May 22, 1997, all of which were co-pending and resulted in Reexamination Certificate B1 (3502nd) issuing April 28, 1998. In the Reexamination Certificate, the patentability of claims 1-9 and 13-21 was confirmed, claim 10 was determined to be patentable as amended, and claims 11 and 12, dependent on an amended claim, were determined to be patentable. Additionally, new claims 22-73 were added and determined to be patentable.

II. Presentation of a Proposed Count

The attached Appendix B sets forth a proposed single count. The proposed count encompasses Claim 1 of the Buter patent, which is believed to be the broadest claim of the Buter patent, and Claim 63 of the present Appleby et al application, which is believed to be the broadest claim of the present application. The proposed count is therefore at least as broad as claim 1 of the Buter patent and claim 63 of the Appleby et al application.

III. Identification of Claims of the Buter Patent Which Correspond to the Proposed Count

Claims 1-73 of the Buter patent are believed to correspond substantially to the proposed count.

The Buter claims do not correspond exactly to the proposed count. Specifically, (1) the Buter claims recite that the catalyst is a “transesterification” catalyst while the proposed count does not recite that the catalyst is a “transesterification” catalyst; (2) the Buter claims recite a “first reaction zone” in the initial reaction stage; (3) the Buter claims recite that the in-going and out-going streams are “mass-balanced”; and (4) the Buter claims recite product streams comprising reactant mixture having “a polyol conversion of 1% or more” and “lower alkyl” alcohol while the proposed count recites products comprising reaction mixture having “a degree of esterification of 1% or more” and “volatile” alcohol.

However, these literal differences do not prevent the Buter claims from corresponding substantially to the count for the following reasons:

(1) The polyol fatty-acid ester synthesis reaction recited in the count is a transesterification reaction, whereby the catalyst recited in the proposed count is inherently a

transesterification catalyst. The Buter limitation of a transesterification catalyst is therefore encompassed by and not patentably distinct from the catalyst recited in the proposed count.

(2) The "first reaction zone" in the Buter claims is a part of and not patentably distinct from the initial reaction stage and therefore is encompassed by the initial reaction stage recited in the proposed count.

(3) As set forth by Felder et al, *Elementary Principles of Chemical Processes* (Wiley 1978), p. 82 (Appendix C), in a continuous process the inputs and outputs flow continuously through the duration of the process and, if all the variables in a process do not change with time, except possibly for minor fluctuations about constant mean values, the process is said to be operating at steady state. Accordingly, recitation in the proposed count that the reaction mixture in the initial reaction stage is in steady state, with continuous introduction of reactants and continuous removal of products, inherently requires the in-going and out-going streams to the reaction mixture in the initial reaction stage to be mass-balanced as recited in the Buter claims. Thus, the Buter limitation is encompassed by and is not patentably distinct from the steady state conditions recited in the proposed count.

(4) The Buter specification discloses polyol conversion as "the percentage of polyol hydroxyl groups of the original polyol that on average have been esterified with fatty acids" (column 1, lines 32-35). This corresponds with the definition of degree of esterification, for example as set forth in the Appleby et al specification at page 2, lines 18-23. Additionally, the lower alkyl alcohol of the Buter patent claims is inherently a volatile alcohol (see, for example, column 5, line 55 - column 61, line 18 of Buter) and therefore is within the scope of "volatile" alcohol recited in the proposed count.

Thus, the Buter patent claims 1-73 correspond to the proposed count.

IV. Claims of the Appleby et al Application Which Correspond to the Proposed Count

Claims 63-78, which were first presented in parent application Serial No. 07/932,275 in an Amendment filed August 21, 1992, and new claims 79-118 presented herein are believed to correspond to the proposed count. An explanation of how each of claims 63-118 corresponds to the proposed count is set forth in the attached Appendix D.

V. Application of the Terms of the Appleby et al Claims Corresponding to the Proposed Count to the Appleby et al Application Disclosure

The attached Appendix E provides an element-by-element recitation of newly added claims 79-118 and a corresponding indication of the passages in the originally filed Appleby et al application where, at the very least, these claims find support. Pages 4-13 of the Amendment filed August 21, 1992 in parent application Serial No. 07/932,275 set forth an element-by-element recitation of claims 63-78 and a corresponding indication of the passages in the originally filed Appleby application where, at the very least, claims 63-78 find support. A copy of the August 21, 1992 Amendment from parent application Serial No. 07/932,275 is attached as Appendix F.

VI. The Requirements of 35 U.S.C. §135(b) are Satisfied

35 U.S.C. § 135(b) states that “A claim which is the same as, or for the same or substantially the same subject matter as, a claim of an issued patent may not be made in any application unless such a claim is made prior to one year from the date on which the patent was granted.” It has been

stated that the 1939 amendment to R.S. 4903, codified with a minor revision in 1952 as present §135(b), was intended by Congress to be a “statute of repose...to be a statute of limitations, so to speak, on interferences so that the patentee might be more secure in his property right.” *Ex parte McGrew*, 41 U.S.P.Q. 2d 2004, 2006 (BPAI 1995), quoting *Corbett v. Chisholm*, 196 U.S.P.Q. 337, 342 (CCPA 1977).

A. Claims 63-78

Claims 63-78 presented in the Amendment filed August 21, 1992 in parent application Serial No. 07/932,275 claim substantially the same subject matter as claims 1-9, 13-15 and 17-20, respectively, of the Buter patent. Since the Buter patent issued on August 27, 1991, the one-year time limit imposed by 35 U.S.C. §135(b) was met with respect to presentation of claims 63-78 on August 21, 1992.

B. Claims 79, 80 and 82-118

Claims 79, 80 and 82-119 presented herein are based on claims of the Buter patent which were added or substantially amended in the Reexamination Certificate of April 28, 1998.

Specifically, claims 79 and 80 claim substantially the same subject matter as Claims 10 and 11, respectively, of the Buter patent. Claim 10 of the Buter patent was substantively amended in the Reexamination Certificate by amendment of the phrase “fatty acid lower-alkyl ester” (which is a reactant) to read “lower -alkyl alcohol” (which is a by product), and claim 11 depends from claim 10.

Claims 82-84 claim substantially the same subject matter as Claims 22, 23 and 25, respectively, of the Buter patent, while Claim 85 claims substantially the same subject matter as Claims 26, 59 and 64 of the Buter patent. Claims 86-88 claim substantially the same subject matter

as Claims 27, 31 and 32, respectively, of the Buter patent. Claim 89 claims substantially the same subject matter as Claims 33 and 53, while Claims 90-107 claim substantially the same subject matter as Claims 34-39, 41-43, 46-52 and 54-55, respectively, of the Buter patent. Finally, Claims 108-118 claim substantially the same subject matter as Claims 57, 58, 60-63, 65-67, 69 and 71, respectively, of the Buter patent. All of claims 22-73 of the Buter patent were added by the Reexamination Certificate.

According to 35 U.S.C. § 307(b):

Any proposed amended or new claim determined to be patentable and incorporated into a patent following a reexamination proceeding will have the same effect as that specified in section 252 of this title for reissued patents on the right of any person who made, purchased, or used . . . anything patented by such proposed amended or new claim, or who made substantial preparation for the same, prior to issuance of a certificate under the provisions of subsection (a) of this section.

35 U.S.C. §252, in turn, provides that a reissue patent will be effective continuously from the date of the original patent to the extent that its claims are identical with the original patent. With respect to liability for infringement of claims in a reissue patent, the Federal Circuit has stated:

“The original claims are dead. The statute [35 U.S.C. §252] permits, however, the claims of the reissue patent to reach back to the date the original patent issued, *but only if* those claims are identical with claims in the original patent. With respect to new or amended claims, an infringer’s liability commences only from the date the reissue patent is issued.”

Seattle Box Company, Inc. v. Industrial Crating & Packing, 221 U.S.P.Q. 568, 574-5 (Fed. Cir. 1984) (emphasis in the original). An infringer’s liability with respect to new or amended claims in a reissue patent commences only from the date of the reissue patent. Thus, prior to the date of the reissue patent, the new and amended claims provide no property rights.

Since amended and new claims in a reexamined patent are treated the same as amended and new claims in a reissue patent for intervening rights and infringement damages, the amended and

new claims in a reexamined patent should also be treated the same as amended and new claims in a reissue patent with respect to the date that property rights vest in the claims. That is, prior to the date of the reexamination certificate, the amended and new claims provide no property rights.

The amended Buter claim 10, and claim 11 dependent thereon, and the newly added Buter claims 22-73, which were incorporated into the Buter patent by the Reexamination Certificate issued on April 28, 1998, were not in existence as of the August 27, 1991 issue date of the original Buter patent. Any property rights based on the amended claim 10, or claim 11 dependent thereon, or newly added claims 22-73 did not come into being until the Reexamination Certificate issued. Therefore, the "statute of limitations" on interferences for the claims which were substantively amended (claims 10 and 11) or newly added (claims 22-73) in the Reexamination Certificate should run from the date that the Reexamination Certificate issued and any property rights in those claims came into existence, namely April 28, 1998. Were it to be otherwise, a patentee could circumvent the interference process by merely substantively amending all claims or by canceling all existing claims and adding new claims during a reexamination, provided the reexamination certificate were to issue more than one year after the issuance of the original patent.

Therefore, the date for purposes of 35 U.S.C. §135(b) on which the patent containing substantively amended claim 10, and claim 11 dependent thereon, and new claims 22-73 of the Buter patent was granted should be the date of the Reexamination Certificate, April 28, 1998. Accordingly, claims 79, 80 and 82-119 copied by Applicants in the present amendment have been copied within one year of the grant of the patent on the substantively amended and new Buter patent claims, whereby 35 U.S.C. §135(b) is satisfied.

C. Claim 81

Finally, as set forth above, claim 81 presented herein claims substantially the same subject matter of claim 21 of the Buter patent. Claim 81 depends from claim 63 and recites a process according to claim 63 wherein the one or more subsequent reaction zones are provided in a tray reactor.

While claim 81 is presented more than one year after issuance of claim 21 of the Buter patent, the requirements of 35 U.S.C. § 135(b) are satisfied. That is, an applicant is permitted to copy a patent claim outside of the one year requirement of 35 U.S.C. § 135(b) if the applicant has been claiming substantially the same subject matter within the year. *Reiser v. Williams*, 45 CCPA 953, 255 F.2d 419, 118 USPQ 96 (1958); *Stalego v. Heymes*, 46 CCPA 772, 263 F.2d 334, 120 USPQ 473 (1959); *Wetmore V. Miller*, 477 F.2d 960, 177 USPQ 699 (CCPA 1973); MPEP 2307.02. Particularly, limitations which are immaterial may be disregarded when applying the one year requirement under 35 U.S.C. §135. *Reiser v. Williams*, *supra* at 99.

As noted above, claim 81 depends from claim 63 and recites a process according to claim 63 wherein the one or more subsequent reaction zones are provided in a tray reactor. Claim 21 of the Buter patent similarly depends from claim 1 of the Buter patent and recites a process according to claim 1 wherein the one or more subsequent reaction zones are compartments of a multi-tray column reactor. One of ordinary skill will appreciate that tray reactors are synonomous with multi-tray column reactors and that such reactors are well known in the art. Moreover, mere apparatus limitations are generally entitled to little weight in evaluating method claims and the patentability of method claims cannot be predicated on an apparatus limitation, *Stalego v. Heymes*, *supra* at 477-

478 (citations omitted). Thus, the limitations of present claim 81 and of Buter claim 21 are not material limitations with respect to the processes of the respective independent claims.

Accordingly, Claim 81 claims substantially the same subject matter as claim 63, and Claim 63 was copied from the Buter patent within one year of its issue date. Claim 81 therefore meets the one year requirement of 35 U.S.C. § 135(b).

VII. Conclusion

A Showing Under 37 C.F.R. §1.608(b) is submitted herewith. Accordingly, pursuant to the provisions of 37 C.F.R. §1.607, and in view of the foregoing amendments and remarks, and the accompanying Appendices, Applicants respectfully request that an interference be declared between claims 63-118 of the present application and claims 1-73 of the Buter U.S. Patent No. 5,043,438.

Respectfully submitted,

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